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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/807,080

03/23/2004

Noriyuki Fujimori

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23389

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09/06/2007

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EXAMINER

SMITH, PHILIP ROBERT

ART UNIT

PAPER NUMBER

3739

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/807,080	<b>Applicant(s)</b> FUJIMORI ET AL.	
	<b>Examiner</b> Philip R. Smith	<b>Art Unit</b> 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/2 and 8/7/07</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Continued Examination Under 37 CFR 1.114

- [01] A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/7/2007 has been entered.

### Claim Rejections - 35 USC § 103

- [02] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [03] Claims 1-2,4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoi (2003/0023150) in view of Niida (2002/0045801).
- [04] With regard to claim 1:
- [04a] Yokoi discloses a capsule endoscope ("capsule-type endoscope 101F" [0266]) comprising:
- a swallowable capsule housing ("capsule body 102A" [0266]) configured to be swallowed by a patient;
  - an image pickup unit ("image pickup device 107a" [0230]), a wireless communication unit ("antenna 113a" [0267]), a lighting unit ("LED 108a" [0270]) and a signal processing unit ("driving and processing circuit 111a" [0253]), each of which being disposed in the swallowable capsule housing (see Figure 29);
  - an internal circuit comprising one or more of the image pick-up unit, the signal processing unit, the wireless communication unit, and the lighting unit, respectively;

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[04b] Yokoi does not disclose

- a temperature detection means disposed in the swallowable capsule housing and arranged in at least one of internal electric circuits and which detects an internal temperature of the corresponding internal electric circuit, converts information indicating the detected temperature into an electric signal in a predetermined format, and generates the electric signal;
- temperature determination means disposed in the swallowable capsule housing for performing a predetermined determination on the basis of the electric signal generated from the temperature detection means; and
- power control means disposed in the swallowable capsule housing for controlling power supply to the corresponding internal electric circuit on the basis of the determination result obtained by the temperature determination means.

[04c] Niida discloses

- a temperature detection means ("temperature detector 27," [0074]) arranged in a lighting unit ("light source unit 23") and which detects an internal temperature of the lighting unit, converts information indicating the detected temperature into an electric signal in a predetermined format, and generates the electric signal;
- temperature determination means ("CPU 31," [0075]) for performing a predetermined determination on the basis of the electric signal generated from the temperature detection means ("detects whether the temperature at or near the lamp is equal to or larger than a predetermined value," [0062]); and

- power control means ("lamp power supply 24," [0075]) for controlling power supply to the corresponding internal electric circuit on the basis of the determination result obtained by the temperature determination means.

[04d] Niida discloses that "temperature in the housing of the light source apparatus rises to exceed the temperature stipulated in the specifications for the electronic endoscope system. Consequently, the electronic circuits may malfunction" ([0010]). Yokoi acknowledges that "since the LED 108a generates heat, illumination in usual observations is conducted at an electric current of no higher than a standard value" ([0272]). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the temperature detection means, temperature determination means, and power control means disclosed by Niida into the capsule endoscope disclosed by Yokoi. A skilled artisan would be motivated to do so in order to prevent the heat generated by "LEDs 108a" from causing nearby electronic circuits from malfunctioning. It would also be obvious to a skilled artisan that excessive heat generated by Yokoi's "LEDs 108a" could potentially injure the patient.

[05] With regard to claim 2: Niida discloses that when the temperature determination means determines that the internal temperature is higher than a predetermined value ("If the temperature at or near the lamp is equal to or larger than a predetermined value..." [0074]), the power control means controls so that the power supply to the corresponding internal electric circuit is interrupted ("stops supply of power to the lamp 22," [0075]).

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- [06] With regard to claim 4: Niida discloses that the temperature detection means comprises a member which is independent of the internal electric circuits and is arranged in a power supply line constituting a part of the internal electric circuits (see Fig. 5).

### **Additional Claim Rejections - 35 USC § 103**

- [07] Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoi (2003/0023150) in view of Niida (2002/0045801) and in further view of Tamaoki (4,757,347).
- [08] Niida discloses that "temperature detector 27" is a "temperature detecting means that detects whether the temperature at or near the lamp is equal to or larger than a predetermined value" ([0062]).
- [09] Niida does not disclose that this is particularly a thermal fuse or thermistor.
- [10] Tamaoki discloses "[a] temperature detector 20 with a built-in thermistor and a thermal fuse."
- [11] At the time of the invention, it would have been obvious to a person of ordinary skill in the art that, the "temperature detecting means" disclosed by Niida take the form of a thermistor or thermal fuse. A skilled artisan would be motivated to do so because these are conventional forms of temperature detecting means. In reduction to practice, it is obvious to use well-known elements.

### **Response to Arguments**

- [12] Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

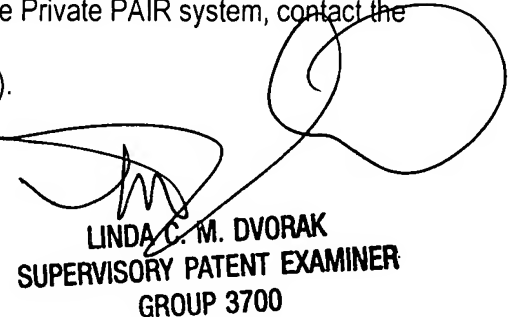
### **Conclusion**

- [13] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip R. Smith whose telephone number is (571) 272 6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.

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[14] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.

[15] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'R. J. H.', located below the text of paragraph [15].A handwritten signature in black ink, appearing to be 'Linda C. M. Dvorak', is written over a rectangular stamp. The stamp contains the text 'LINDA C. M. DVORAK', 'SUPERVISORY PATENT EXAMINER', and 'GROUP 3700' in bold, uppercase letters.

**LINDA C. M. DVORAK**  
**SUPERVISORY PATENT EXAMINER**  
**GROUP 3700**